

# PATENT ABSTRACTS OF JAPAN

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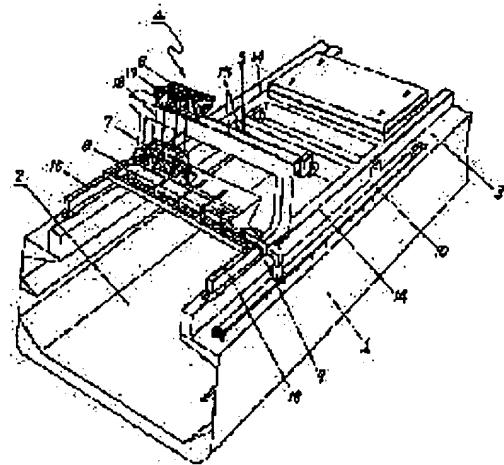
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## (54) UNLOADING DEVICE FOR CARGO IN BULK IN HOLD

### (57)Abstract:

PROBLEM TO BE SOLVED: To efficiently perform unloading by providing a traveling truck to be moved in the longitudinal direction of a hull on a deck and a transverse traveling truck to be moved in a ship side direction on the traveling truck, suspending a grab bucket from the transverse traveling truck so as to be liftable and performing unloading work by the bucket.

SOLUTION: A traveling truck 5 is moved over the hatch of a hold 2 and in the longitudinal direction of a hull on a rail 14 on a deck 3 and a hopper 8 for receiving the cargo in bulk from the grab bucket 7 is provided. The hopper 8 is moved on a rail 16 on the leg part of the traveling truck 5 in the longitudinal direction of the hull and a feeder conveyor 9 is provided immediately below the hopper 8. The hopper 8 is associatively moved to a position for passing the bucket 7 during the vertical movement of the grab bucket 7 and the grab bucket 7 reaches its upper limit position and when during the releasing of the cargo, the hopper is associatively moved to a position immediately below the bucket 7. The cargo fed into the hopper 8 is carried by the feeder conveyor 9, first and second belt conveyors 10 and a shuttle conveyor and discharged to the outside of the ship.



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## LEGAL STATUS

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